Industry Profiles 2016

Professional, Scientific and Technical Services Industry

Alberta Government

OVERVIEW

The Professional, Scientific and Technical Services industry[1] in Alberta includes enterprises that make knowledge and skills available to other organizations or to the public, often on a project basis. For example, they may provide:

- legal services and accounting and related services;
- architectural, engineering and related services;
- surveying and mapping services;
- graphic, industrial or computer systems design services;
- management, scientific and technical consulting services, research and development services;
- advertising, public relations or market research services;
- translation services; and
- veterinary services.

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[1] North American Industry Classification System (NAICS) 2007 major group 54

SECTION A
BUSINESS ENVIRONMENT

1. 2015 Employment and Unemployment Numbers and Rates

Table 1

	Alberta	Professional, Scientific and Technical Services Industry
Employment	2,301,100	173,200
Employment Share	N/A	7.5%
Unemployment	148,000	8,100
Unemployment rate	6.0%	4.5%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2015
Note: Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics[2] **website or** Statistics Canada[3].

2. Industry's Growth

- **The Professional, Scientific and Technical Services industry accounted for 7.5% of total employment in Alberta in 2015.**
- **Employment in this industry is expected to grow at an average rate of 2.3% from 2016 to 2019[4].**
- **The industry is expected to account for 8.2% of total employment in Alberta in 2016.**

For more information, see the Alberta Learning Information Service (ALIS)[5] **website for descriptions of industries.**

[2] See http://work.alberta.ca/labour/labour-force-statistics-and-annual-reviews.html
[3] See http://www.statcan.gc.ca
[4] Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2015 – 2019, Industry Employment Outlook
[5] See http://www.alis.alberta.ca

3. Facts, Trends and Outlook

According to Statistics Canada's National Economic Accounts, the Professional, Scientific and Technical Services industry accounted for approximately 4.9% of Alberta's Gross Domestic Product in 2015, up from 4.7% in 2005. Its contribution to Alberta's total employment remain unchanged at 7.5% in 2005 and 2015.

Total employment (the total number of employees and self-employed people, 15 years and over) in 2015 was 6.0% lower than its level in 2014. Over the last 10 years, employment increased by 37,500 from 2005, a 27.6% increase. There were 173,200 employed in the industry in 2015, of whom 86.5% were full time and 13.5% were part time.

Table 2

Characteristic	Alberta	Professional, Scientific and Technical Services
Median Retirement Age (years)	64.3	N/A
Average Number of Hours Worked per Week	36.9	36.8
Multiple Jobholders (% of total employment)	5.6%	4.5%
Average Job Tenure (months)	88.8	87.1
Employees Under Union Coverage (%)	19.7%	2.4%
Employees Working Overtime per Week (%)	17.2%	15.2%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0022, 282-0031, 282-0042, 282-0078 and 282-0084, 2015, and custom tabulation (median retirement age)
Note: The percentage of multiple jobholders is obtained by dividing the number of multiple jobholders by total employment. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.

4. Size of Businesses in Alberta and the Industry

Table 3

Establishment Size	Businesses in Alberta		Businesses in Professional, Scientific and Technical Services	
	Number of Employees	%*	Number of Employees	%*
Less than 20 employees	686,000	35.6%	42,400	36.1%
20 to 99 employees	699,000	36.2%	40,600	34.6%
100 to 500 employees	345,700	17.9%	22,600	19.3%
More than 500 employees	195,500	10.1%	11,700	10.0%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0076, 2015

* Percentages may not add up to 100 due to rounding

Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.

SECTION B
HUMAN RESOURCES PROFILE

1. Occupational Information

Some examples of occupations in the Professional, Scientific and Technical Services industry include:

- accountant;
- architect;
- civil engineer;
- graphic designer; and
- lawyer.

For a complete listing of all occupations related to this industry, as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles[6] website.

2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown in the Professional, Scientific and Technical Services industry in 2015 was as follows:

- women employed: 74,200 people, or 42.8%
- men employed: 98,900 people, or 57.1%

Overall in Alberta, women accounted for 45.1% and men made up 54.9% of total employment (for all industries).

Table 4

Age Characteristics	Employment in Alberta		Employment in Professional, Scientific and Technical Services	
	Number	%*	Number	%*
15-24 years	320,300	13.9%	11,700	6.8%
25-54 years	1,551,700	67.4%	126,100	72.8%
55 years and over	429,100	18.6%	35,400	20.4%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2015
*Percentages may not add up 100 due to rounding.

[6] See http://occinfo.alis.alberta.ca/occinfopreview

3. Wages and Salaries

Chart 1

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0071, 2015
Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

Wage and Salary Information for Selected Occupations

Table 5

Occupation	Average Hourly Wage			Average Annual Salary
	Starting	Overall	Top	
Lawyer and Quebec notary	$68.70	$66.25	$110.76	$138,074
Electrical engineer[1]	$36.38	$49.02	$71.51	$99,828
Graphic designer[2]	$22.35	$31.80	$43.04	$61,927
Veterinarian[1]	$36.64	$44.62	$62.55	$85,260

Data Source: 2025 Alberta Wage and Salary Survey

For more information on the *2025 Alberta Wage and Salary Survey*, refer to the WAGEINFO website. For job descriptions, duties, skills and educational requirements of specific occupations in the Professional, Scientific and Technical Services industry, visit the ALIS website.

[1] See http://www.alis.alberta.ca/occinfo/
[2] See http://www.alis.alberta.ca

SECTION C
ADDITIONAL INFORMATION

Links to Industry Associations

- Alberta Association of Architects
  http://www.aaa.ab.ca/
- Alberta Innovates Technology Futures
  http://www.albertainnovates.ca/
- Alberta Land Surveyors' Association
  http://www.alsa.ab.ca/
- Association of Professional Engineers, and Geoscientists of Alberta
  http://www.apega.ca/
- Certified General Accountants' Association of Alberta
  http://www.cga-alberta.org/
- Chartered Accountants of Alberta
  http://www.albertacas.ca/
- Economic Developers of Alberta
  http://www.edaalberta.ca/
- Law Society of Alberta
  http://www.lawsocietyalberta.com/

Call us or visit our website for more information or to find the following publications:

- 2015 Annual Alberta Labour Market Review
- Monthly Alberta Labour Force Statistics Highlights and Participation
- Alberta's Occupational Demand and Supply Outlook
- Alberta Labour Force Profiles
- Alberta Industry Profiles

www.work.alberta.ca/labour.html (see Labour Market Information)

In Edmonton: 780-422-4266
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